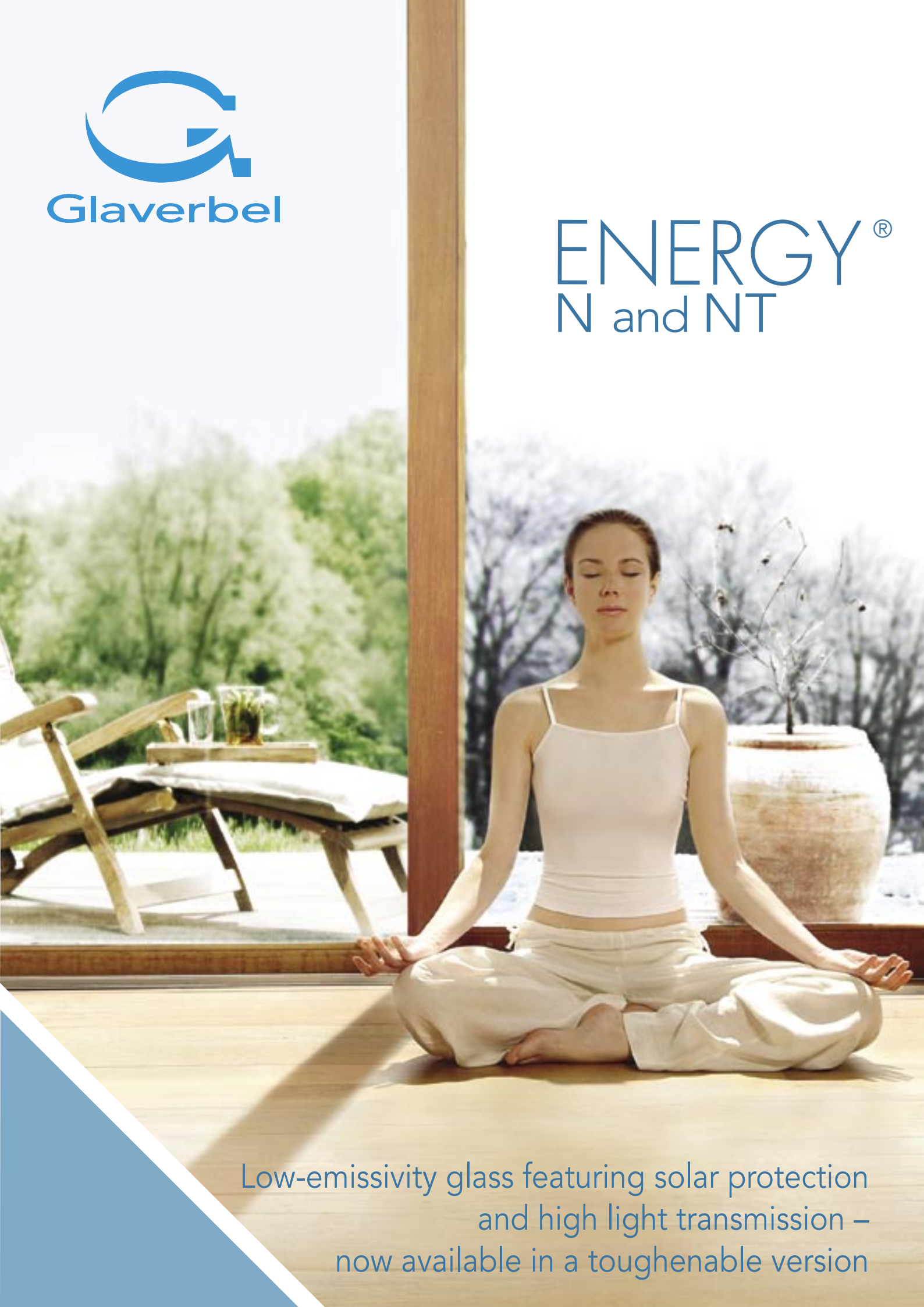


Glaverbel

ENERGY[®]

N and NT



Low-emissivity glass featuring solar protection
and high light transmission –
now available in a toughenable version

ENERGY[®] N

In response to architectural trends towards the greater use of glass, Glaverbel recently launched an innovative glass called "ENERGY". ENERGY reflects the sun's heat, insulates against the cold and offers numerous other qualities: maximum light transmission, thermal comfort in summer and winter alike, savings on heating and air-conditioning and an even temperature throughout the room. ENERGY helps improving quality of life whilst protecting the environment and reducing energy costs. Unlike other solutions, this glass is totally neutral and hard to distinguish from ordinary glass. Glaverbel, buoyed by its leading position in coated glasses, is now

SUMMER



Warm outside,
cool inside



ENERGY[®] N in summer: superb solar protection

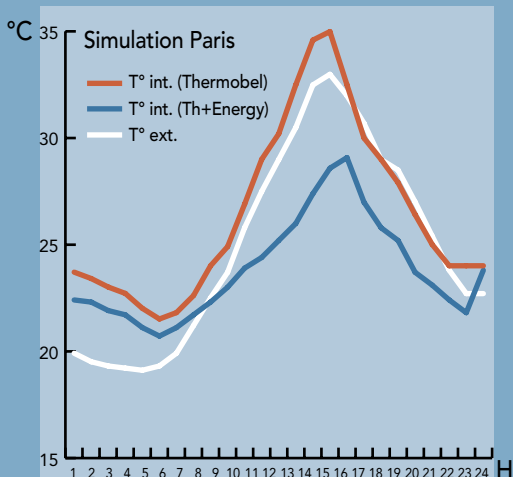
ENERGY N is coated with a double invisible, ultra-thin layer of silver, which reflects the sun's heat whilst letting in light. Its solar factor of 42% means that 58% of the solar heat is kept out by the glass. It therefore helps keep the ambient temperature at a comfortable level, even at the height of summer.

Tests carried out in Paris during a period of very hot weather (32.5°C) showed that the temperature inside a building fitted with ENERGY N glass was up to 7°C lower than in buildings fitted with traditional double glazing. As far as air-con-

ditioning is concerned, the test clearly showed that the temperature in the building rose less quickly and the air-conditioning needed to be on for a shorter period of time, resulting in lower running costs.

Identical tests were carried out in Madrid, where the difference in temperature was almost 12°C.

Regardless of the city involved and even during periods of intense heat, ENERGY N increased comfort in summer by reducing the maximum temperature inside the building.



introducing a neutral-tinted glass - ENERGY N - and its toughenable counterpart ENERGY NT.

Since it can withstand the toughening process, ENERGY NT offers an ideal solution not only for processors, but also for designers, facade specifiers and architects who can now combine toughened and non-toughened materials in the same facade. Once toughened, ENERGY NT is identical to ENERGY N, in terms of aesthetics and has similar thermal and solar performances.

ENERGY® N is part of Glaverbel's Planibel low-emissivity range and is a registered trademark of Glaverbel.



Cool outside,
warm inside



WINTER

ENERGY® N in winter: maximum thermal protection

ENERGY N is a low-emissivity glass. It has the exceptional ability to retain the heat produced inside a building and reduce heat loss, thereby ensuring excellent thermal comfort. With a U-value of $1.1 \text{ W}/(\text{m}^2 \cdot \text{K})$, this innovative product offers maximum thermal insulation, reducing heating costs by up to 68%.

With a view to making the energy savings required under the Kyoto agreements, many European governments are so convinced by the impressive U-value of low-emissivity glass that they have made its use compulsory.





BENEFITS

Optimum comfort at all times

ENERGY N: life in light

ENERGY N has a light transmission coefficient of 71%, nearly the same as conventional double glazing.

ENERGY N: an environmentally friendly glass offering maximum comfort

In addition to increasing comfort and saving money, ENERGY N reduces the emission of CO₂ into the atmosphere by reducing energy consumption for air-conditioning and heating.

ENERGY N: efficient and discrete

ENERGY N has a neutral appearance, just like traditional double glazing. The difference with ENERGY N is that it insulates in both winter and summer.

ENERGY[®] N – a total solution for processors and architects

ENERGY N – carefully designed with the creativity of the architect and building owner in mind.

ENERGY N and **ENERGY NT** can be fitted on the same facade, fulfilling all requirements in terms of thermal insulation, solar control, sound insulation and security. ENERGY N can be combined with other types of glass having different properties, allowing architects to create a uniform look without any of the associated restrictions.

ENERGY N and **ENERGY NT** – carefully designed with the efficiency of the processor in mind

- The glass can be stored for three months, and is always available when the processor needs it.
- Processors can cut and toughen the glass themselves, or assemble it in a double glazing unit, thus offering their customers a more efficient service.

Optimum comfort at all times ENERGY[®] N

TECHNICAL SPECIFICATIONS

ENERGY N is a monolithic glass designed exclusively for insulating glazing.

Standard thickness: 4, 6, 8 and 10 mm monolithic Planibel 4.4 - 6.4 - 6.6 (1 or 2 PVB interlayers) laminated Stratobel^{*}. For other thicknesses contact Glaverbel.

Dimensions: 6,000 X 3,210 mm

Under certain conditions, condensation may form temporarily on the outer pane of the insulating glass.

^{*} Also available in an acoustic Stratophone version.

Main heat and light characteristics:

	Composition	Light transmission (%)	Light reflection (%)	Solar factor (%)		U-value W/(m ² .K)	
				EN 410	ISO 9050	90% Argon	100% Argon
ENERGY [®] N	4-12-4 mm	71	12	42	40	1.3	1.2
	4-15-4 mm	71	12	42	39	1.1	1.1
ENERGY [®] NT	4-12-4 mm	72	13	45	42	1.2	1.2
	4-15-4 mm	72	13	45	42	1.1	1.0



Glaverbel
www.MyGlaverbel.com
 Ch. de La Hulpe 166 - B-1170 BRUSSELS
 Tel.: +3226743111 - Fax: +3226724462
 marketing.communication@glaverbel.com